



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: APRIL 22, 2024

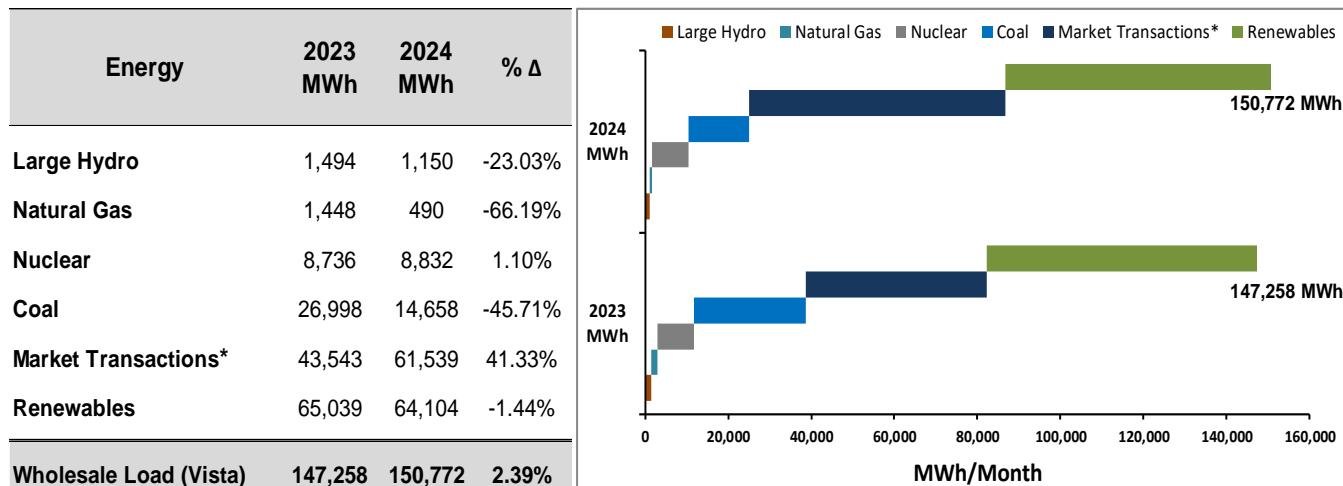
GENERAL MANAGER'S REPORT

SUBJECT: **MONTHLY POWER SUPPLY REPORT – FEBRUARY 29, 2024**

Monthly Power Usage:

The wholesale load (Vista Substation) for February was 150,772 MWh, an increase of 3,514 MWh compared to the same month in the previous year. Renewable generation served 42.52% or 64,104 MWh of Riverside's wholesale load. Coal generation served 9.72% or 14,658 MWh of the wholesale load. Nuclear energy covered 5.86% or 8,832 MWh. In February, internal natural gas generation served 0.32% or 490 MWh of wholesale load. Hydro generation represents 0.76% or 1,150 MWh of Riverside's wholesale load. Riverside's emissions free and renewable resources generation decreased slightly in February 2024 compared to February 2023. Finally, the balance for February was covered by Market Transactions, which represented 40.82% or 61,539 MWh of the load.

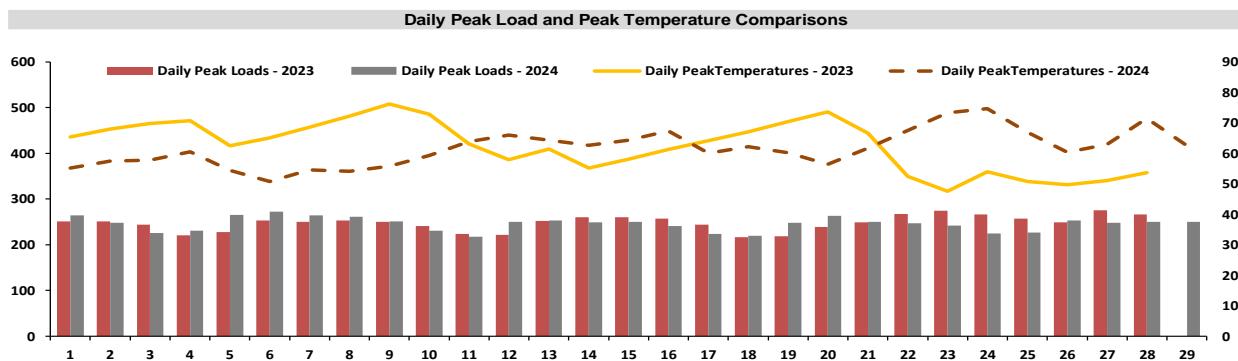
Wholesale Resource Mix - February 2023 vs 2024



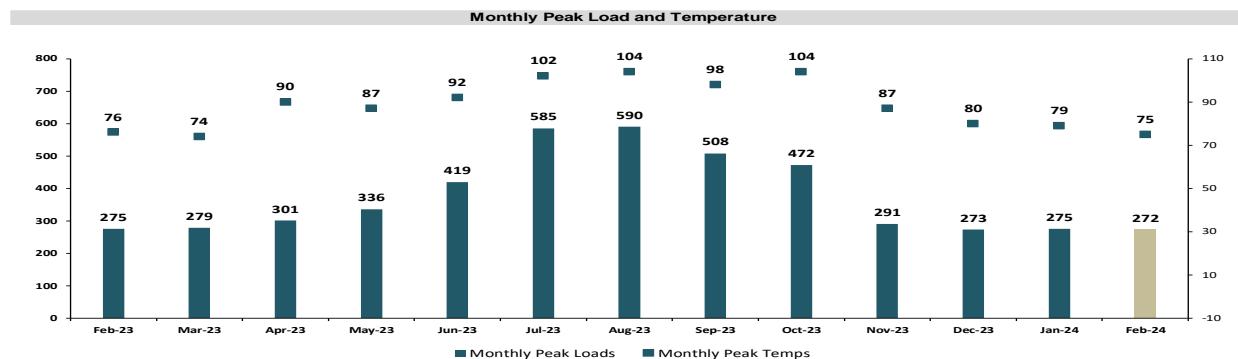
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from/to the CAISO.

Daily & Monthly Load & Temperature Trends

Weather has a significant impact on electricity demand, especially the variable temperature. Typically, as temperatures increase, electricity demand will also increase, and vice versa. The charts below graphically extrapolate the correlation between weather and electricity demand. February 2024, on average, was similar in weather to the same month in the previous year. February 2024 average daily peak temperatures oscillated around 62 degrees. While in February 2023, average daily peak temperatures were in the same range of 62 degrees. The monthly peak temperature in February 2024 was 75 degrees. For comparison, the monthly peak temperature in February 2023 was 76 degrees. Differences in the graphical representation of average temperatures may be due to differences in the day of the week and/or weather trends presenting themselves in earlier or later parts of the month.



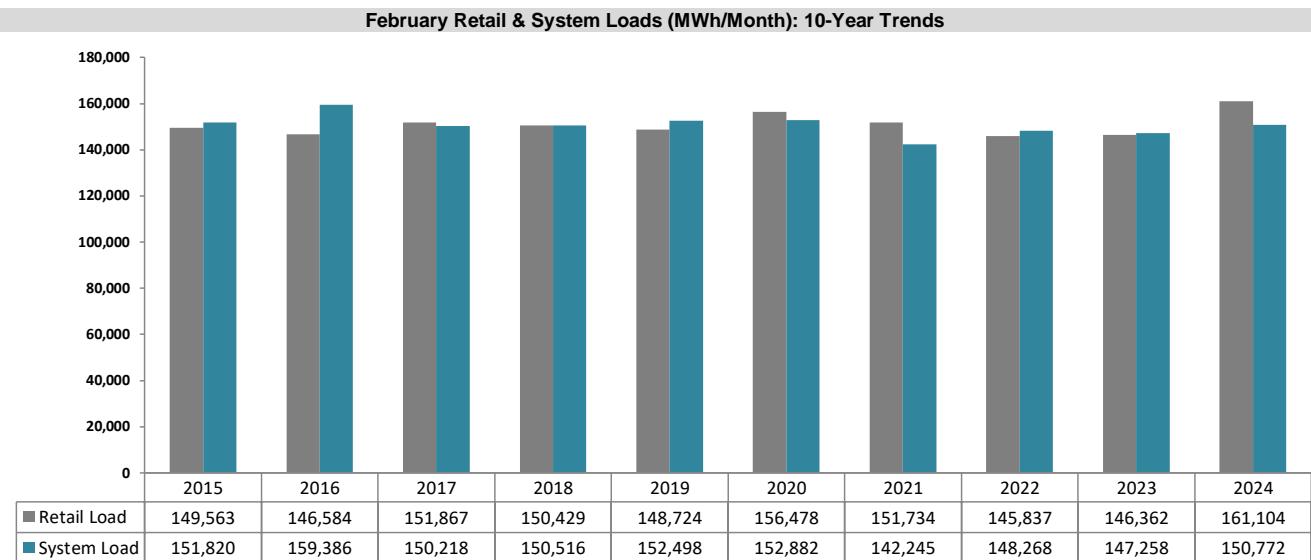
During the first half of February 2024, Riverside experienced warmer temperatures than those seen in the same month in 2023. However, later part of the month, the temperature in 2024 steadily decreased below those seen in 2023, with a pronounced difference in the last five to six days of the month. The average daily peak load in February 2023 was 248 MW, with daily peak loads of 300 MW or greater on 6 out of the 28 days. In February 2024, Riverside observed a similar average daily peak temperature of 62 degrees compared to February 2023. In February 2024, the average daily peak load was 246 MW, with daily peak loads of 300 MW or greater on 6 out of the 29 days. For the most part, the effect of warmer temperatures was isolated to a handful of days and had very little impact on the average load – pointing to relatively similar conditions year over year for February.



Riverside experienced weather conditions similar to those observed in February 2024, thus materializing in a similar monthly peak load. Hourly demand peaked at 272 MW on 02/06/24 HE 13, a decrease of 3 MW compared to a peak of 275 MW the same month last year. Riverside's resources covered 100% of the hourly peak demand on 02/06/24.

10-Year Retail Load Trends

The retail load for February 2024 was 161,104 MWh, an increase of 14,742 MWh from the previous year's reading of 146,362 MWh. The System load for February 2024 was 150,772 MWh, an increase of 3,514 MWh from the prior year's reading of 147,258 MWh. Retail load values can be impacted by the significant adoption of residential PV solar, efficiency programs, adoption of energy-efficient appliances, available meter data, etc.

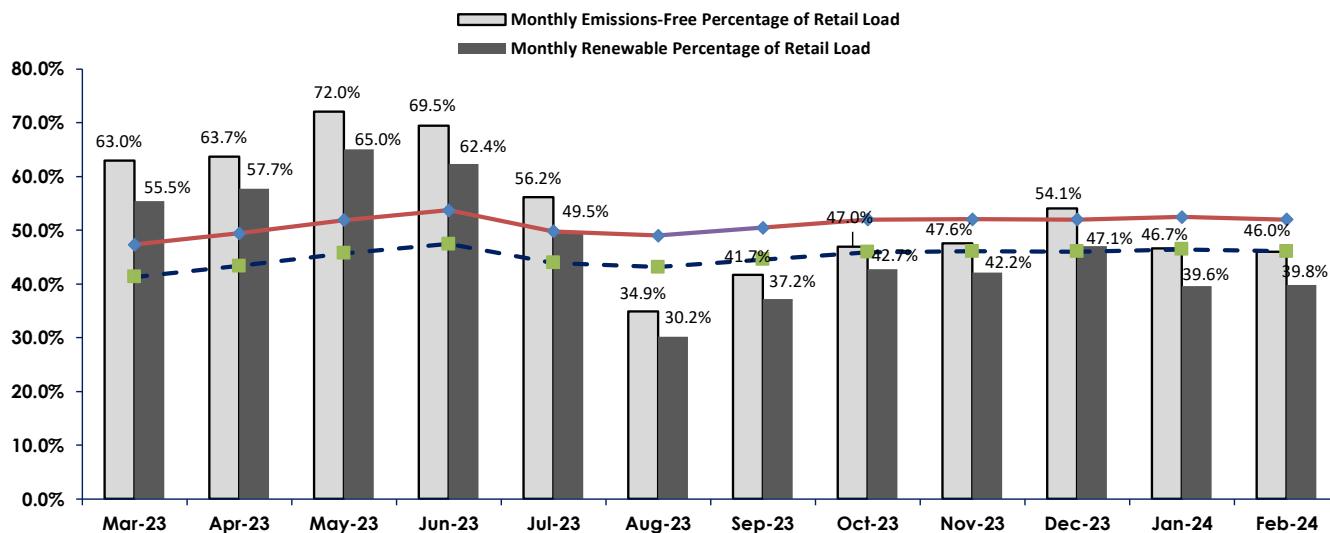


Renewable Generation Trends

In February 2024, nuclear generation experienced a 7.1% decrease in production compared to January 2024 and an increase of 1.1% compared to February 2023. Hydroelectric generation experienced a 1.0% increase compared to January 2024 and a reduction of 23.0% compared to February 2023. February 2024 wind generation experienced a 42.50% increase in output compared to January 2024 and about a 33% reduction compared to February 2023. February 2024 solar generation experienced an increase of 7.0% in output compared to January 2024 and an 11% increase in output compared to February 2023. Lastly, in February 2024, geothermal generation experienced an increase in output of 7.5% in output compared to January 2024 and an 11% reduction compared to February 2023.

In February 2024, renewable generation, as a percentage of retail load, decreased about one percentage point from January 2024 and decreased by 5% percentage points compared to February 2023. Lastly, in February 2024, Emissions-Free generation, as a percentage of retail load, decreased by about .2% percentage points from January 2024 and decreased by about 5% percentage points compared to February 2023. The driving factors for the decreased percentages in February 2024, compared to February 2023, are steady geothermal and solar generation. The Emissions Free and Renewable Resources summary graph reflects a rolling 12-month trend line.

Emission Free and Renewable Resources' Summary



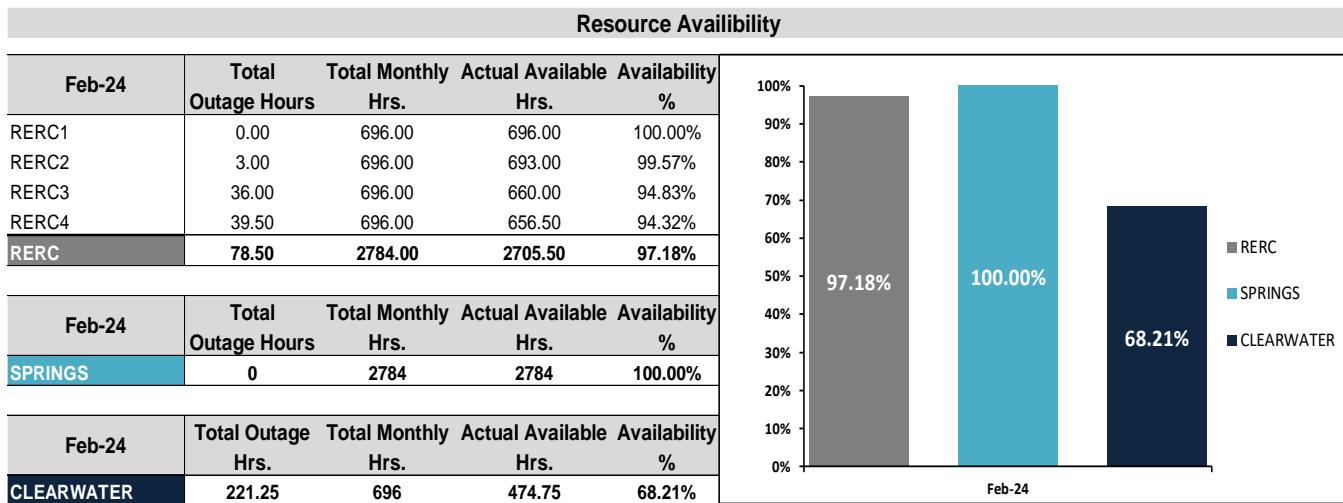
*Riverside's emissions free resources are composed of renewables plus hydro and nuclear

*Riverside's renewable resources are composed of solar, wind and geothermal.

Notes: * CAISO Market Purchases are calculated as CAISO metered system load ("MLAP_RVSD_RVSD") minus sum of all energy purchases.

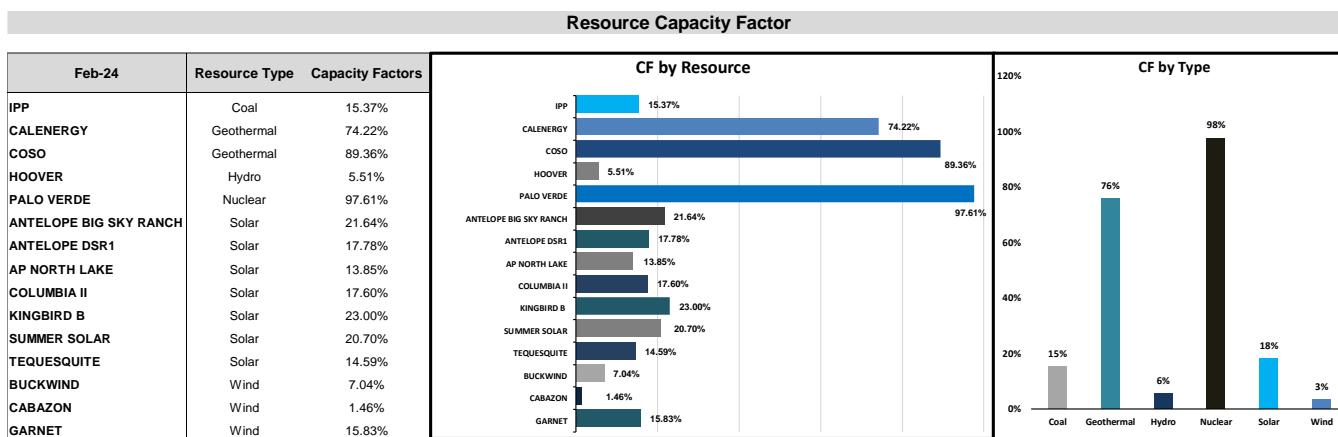
February 2024 Resource Availability - Internal Generation

- RERC's availability for the month was 97.18%.
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 68.21%.



February 2024 Resource Availability – External Resources

Solar resources had capacity factors ranging from 13.85% to 23.00%. Wind resources had capacity factors ranging from 1.46% to 15.83%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 97.61%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 5.51% capacity factor for the month. An undersupply of coal is currently impacting IPP, restricting generation output; thus, its capacity factor was 15.37%. Riverside's geothermal resources had capacity factors ranging from 74.22% to 89.36%, affected slightly by under generation. It is worth noting that intermittent renewable resources, including wind and solar, have capacity factors that are affected by natural factors such as cloud cover, blowing wind, etc.



Resource Outages and Transmission Constraints

- RERC
 - RERC Unit 2 oil pump control issues
 - RERC Unit 3 UPS battery replacement
 - RERC Unit 4 NOx issues & UPS battery replacement
- SPRINGS
 - None
- CLEARWATER
 - Regular maintenance - conducted various electrical maintenance tasks